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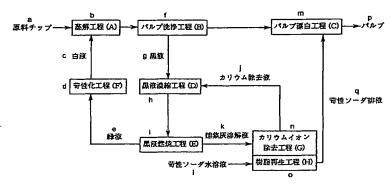
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[続葉有]

(54) Title: PROCESS FOR PRODUCING KRAFT PULP

(54) 発明の名称: クラフトパルプの製造方法



- a...RAW CHIPS
- b...COOKING STEP (A)
- c...WHITE LIQUOR
- d...CAUSTICIZING STEP (F) e...GREEN LIQUOR
- (...PULP WASHING STEP (B)
- g...BLACK LIQUOR
- h...BLACK-LIQUOR CONCENTRATION STEP (D)
- i...BLACK-LIQUOR COMBUSTION STEP (E)
- j...POTASSIUM-REMOVED LIQUID
- k...SOLUTION OF COLLECTED ASH L..AQUEOUS CAUSTIC SODA SOLUTION
- m...PULP BLEACHING STEP (C)
- n...POTASSIUM ION REMOVAL STEP (G) o...RESIN REGENERATION STEP (H)
- q...WASTE CAUSTIC SODA SOLUTION

(57) Abstract: A process for producing a kraft pulp, which includes a potassium ion removal step (G) in which an aqueous solution of collected ashes recovered with a dust collector from a combustion gas discharged from a black-liquor combustion step (E) is passed through a bed of a sodium-form cation-exchange resin packing to adsorb and remove potassium ions and a regeneration step (H) in which the cation-exchange resin used in the potassium ion removal step (G) is regenerated with an aqueous caustic soda solution, wherein a fraction rich in sodium sulfate and sodium carbonate and recovered in the potassium ion removal step (G) is circulated to the black-liquor concentration step (D), and a waste caustic soda solution recovered in the regeneration step (H) is reused in the bleaching step (C).

(57) 要約: ラフトパルプの製造方法において、黒液燃焼工程(E)の燃焼排ガスから集塵機にて回収された捕集灰の水 溶解液をナトリウム形カチオン交換樹脂の充填床に通液してカリウムイオンを吸着除去するカリウムイオン除去工 程(G)と、当該カリウムイオン除去工程(G)で使用されたカチオン交換樹脂の苛性ソーダ水溶液による再生工程(H) とを設け、そして、カリウムイオン除去工程(G)

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- (74) 代理人: 岡田 数彦 (OKADA,Kazuhiko); 〒102-0073 東京都 千代田区 九段北一丁目 1 0 番 1 号 九段勧業ビル 6 階 岡田国際特許事務所 Tokyo (JP).
- (81) 指定国 (国内): AU, BR, CA, CN, ID, IN, KR, NO, NZ, RU, US, ZA.
- (84) 指定国 (広域): ヨーロッパ特許 (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).

添付公開書類:

一 国際調査報告書

2文字コード及び他の略語については、定期発行される 各PCTガゼットの巻頭に掲載されている「コードと略語 のガイダンスノート」を参照。



PATENT COOPERATION TREATY

PCT/JP2003/01160

From the INTERNATIONAL BUREAU

PCT

NOTICE INFORMING THE APPLICANT OF THE COMMUNICATION OF THE INTERNATIONAL APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence)

To:

OKADA, Kazuhiko Okada & Associates 6F, Kudan Kangyo Bldg. 10-1, Kudan-Kita 1-chome Chiyoda-ku, Tokyo 102-0073 JAPON



Date of mailing (day/month/year)
21 May 2004 (21.05.2004)

Applicant's or agent's file reference W005PCT

IMPORTANT NOTICE

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International filing date (day/month/year)
11 September 2003 (11.09.2003)

Priority date (day/month/year)
05 November 2002 (05.11.2002)

Applicant

NIPPON RENSUI CO. et al

1. Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this notice:

AU, CN, EP, KR, RU, US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:

BR, CA, ID, IN, NO, NZ, ZA

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

- Enclosed with this notice is a copy of the international application as published by the International Bureau on 21 May 2004 (21.05.2004) under No. WO 2004/042140
- 4. TIME LIMITS for filing a demand for international preliminary examination and for entry into the national phase

The applicable time limit for entering the national phase will, subject to what is said in the following paragraph, be 30 MONTHS from the priority date, not only in respect of any elected Office if a demand for international preliminary examination is filed before the expiration of 19 months from the priority date, but also in respect of any designated Office, in the absence of filing of such demand, where Article 22(1) as modified with effect from 1 April 2002 applies in respect of that designated Office. For further details, see *PCT Gazette* No. 44/2001 of 1 November 2001, pages 19926, 19932 and 19934, as well as the *PCT Newslener*, October and November 2001 and February 2002 issues

In practice, time limits other than the 30-month time limit will continue to apply, for various periods of time, in respect of certain designated or elected Offices. For regular updates on the applicable time limits (20, 21, 30 or 31 months, or other time limit), Office by Office, refer to the PCT Gazette, the PCT Newsletter and the PCT Applicant's Guide, Volume II, National Chapters, all available from WIPO's Internet site, at http://www.wipo.int/pct/en/index.html.

For filing a demand for international preliminary examination, see the PCT Applicant's Guide, Volume I/A, Chapter IX. Only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination (at present, all PCT Contracting States are bound by Chapter II).

It is the applicant's sole responsibility to monitor all these time limits.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Authorized officer

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